

Claims

- [c1] An inflatable seal cleaning system, for manufacturing processes where an inflatable seal is in direct or indirect contact with a solution which can adhere to the inflatable seals, consisting of:
- a. one or more spray nozzles, mounted above the seal, directed downward toward the seal in such a manner as to impact the seal and chamber above the seal in a fan pattern, with sufficient velocity to reflect the spray to the opposite wall,
 - b. a pump, controlled to deliver individual pulses of water to the spray nozzles at 40 psig,
 - c. one or more solenoid valves to direct the pulses of water to individual spray nozzles,
 - d. one or more mounting blocks, securing the spray nozzles in such a way as to direct the water spray downward at 30 degrees from horizontal toward the seal face,
 - e. rigid or semi-rigid tubing to conduct the water flow from the pulse pump to the spray nozzles.
- [c2] The device in claim 1, where the manufacturing process is the catalytic converter honeycomb coating process.
- [c3] The device in claim 1, where the spray nozzle is a flat fan

spray nozzle, with between 80 degrees and 180 degrees of spray angle.

[c4] The device > <emphasis> </emphasis> water spray pressure is between 20 psig and 125 psig.

[c5] The device in claim 1 where the spray angle from the spray nozzle to the seal is between 15 degrees and 45 degrees.

[c6] The device in claim 1, where the mounting blocks are incorporated into the process equipment, such as tapping the inner wall of the coating chamber.

[c7] The device in claim 1, where the pump is replaced with a pressurized water supply system.

[c8] The device in claim 1, where the number of solenoid valves and nozzles is from one to eight.

[c9] The device in claim 2, where the spray system is actuated after the coated substrate has been removed from the coating chamber.

[c10] The device in claim 2, where the spray system is actuated multiple times after each substrate is removed from the coating chamber,

[c11] The device in claim 2, where the spray system is actu-

ated following a fixed number of coating operations.

[c12] The device in claim 1, here the seals are mounted in any orientation.